

The making of an endocrinologist in India: Life and times at Institute of Post Graduate Medical Education and Research Calcutta

Deep Dutta

Department of Endocrinology, Post Graduate Institute of Medical Education and Research and Dr. Ram Manohar Lohia Hospital, New Delhi, India

ABSTRACT

Endocrinology is relatively one of the newer super-specialties of internal medicine. Following higher secondary schooling, it takes anywhere between 13 and 18 years to become a super-specialist in India, which holds true for endocrinology also. This article intends to highlight the life and the journey of making an endocrinologist in India, through personal experiences, focusing on Institute of Post Graduate Medical Education and Research (IPGMER) Calcutta, the largest super-specialty teaching hospital and research institute of Eastern India. In general, there is lack of adequate exposure to endocrinology during the Bachelor of Medicine, Bachelor of Surgery and MD Internal Medicine Training in India. Pre-Doctorate of Medicine (DM) senior residency goes a long way in developing an orientation for endocrinology. Endocrinology DM entrance examinations are usually a rigorous intimidating affair. Endocrinology training at IPGMER was a heady mix of managing huge number of patients with diverse endocrinopathies, laboratory work, academic presentations, and clinical research. The support and back up provided by the entire faculty enhanced the learning process. As I look back, the 3 years of DM residency flew by like the wink of the eye. The journey of endocrinology is the journey of a lifetime.

Key words: Endocrinology, Institute of Post Graduate Medical Education and Research, residency, training

INTRODUCTION

Exponential advances have led to the genesis of super-specialty streams both in the field of medicine and surgery. The well thriving super-specialty medical streams in India are cardiology, endocrinology, gastroenterology, nephrology, neurology, oncology, hematology, rheumatology, and pulmonary medicine. Endocrinology is perhaps one of the fastest growing super-specialties

in India with the addition of 9 new institutes offering Doctorate of Medicine (DM) endocrinology courses in the last few years.^[1] Perhaps nowhere in life is the saying, “the journey is more important than the destination” more apt than the journey of making of a super-specialist doctor in India. After finishing higher secondary school at 18 years of age, an individual has to go through 5.5 years of Bachelor of Medicine, Bachelor of Surgery (MBBS) training, and then crack perhaps one of the most difficult entrance examinations in the world to get into 3 years of residency in medicine or surgery (Doctor of Medicine [MD] or Masters of Surgery). He then overcomes another round of extremely tough entrance examinations to enter into the 3-year super-specialty training course (DM or Magister of

Corresponding Author: Dr. Deep Dutta,
Department of Endocrinology, Post Graduate Institute of
Medical Education and Research and Dr. Ram Manohar Lohia
Hospital, 1 Baba Kharak Singh Marg, New Delhi - 110 001, India.
E-mail: deepdutta2000@yahoo.com

Access this article online

Quick Response Code:



Website:
www.ijem.in

DOI:
10.4103/2230-8210.163209

This is an open access article distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 3.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as the author is credited and the new creations are licensed under the identical terms.

For reprints contact: reprints@medknow.com

Cite this article as: Dutta D. The making of an endocrinologist in India: Life and times at Institute of Post Graduate Medical Education and Research Calcutta. Indian J Endocr Metab 2015;19:676-9.

Chirurgy), making a total of 11.5 years at minimum. This usually practically ends up being anywhere between 13 and 18 years, taking into account the extra years often needed to clear the entrance examinations at each stage. Also, years are often lost when a young doctor is unable to decide whether to go for super-specialty training or not and what stream to select. This article intends to highlight the life and the journey of making an endocrinologist in India, through personal experiences, focusing on IPGMER Calcutta, the largest super-specialty teaching hospital and research institute of Eastern India. This article hopes to assist all young doctors across the country in making an informed decision regarding taking up endocrinology for life.

PREENDOCRINOLOGY DAYS: THE BACHELOR OF MEDICINE, BACHELOR OF SURGERY AND DOCTOR OF MEDICINE YEARS

Getting into medical school after cracking the all India premedical test is considered to be a major milestone, and a matter of great pride both for the students and their parents in India (2500 odd seats for nearly 6.3 lakh aspiring candidates).^[2] I was one of these lucky ones to have got selected for MBBS at Jawaharlal Institute of Post Graduate Medical Education and Research (JIPMER), Puducherry. JIPMER, established originally in 1823 (as Ecole de Médecine de Pondichéry), is the Oldest Medical School to teach Western Medicine in India.^[3] JIPMER is one of the most prestigious and sought after Medical Schools in India, persistently ranking in top four among all the institutions in the country.^[4] Ignorance was truly bliss at that point of time, as I had no knowledge of the long arduous road ahead. Even with an exposure to more than 16 different specialties during the MBBS training, internal medicine was the subject that had always fascinated me. Perhaps no other field of medicine is as glorified during the MBBS years as internal medicine. At that point of time, I had scarce knowledge of super-specialty degrees, and Harrison's Principles of Internal Medicine was the ultimate Gita in Internal Medicine for me. MD in Internal Medicine became a reality at Medical College, Calcutta. Only then I did realize the humongous nature of the subject.

Internal medicine specialty training in general I feel is lopsided with primary focus on the specialties of neurology, cardiology, gastroenterology, infectious diseases, and critical care medicine. Exposure to endocrinology, rheumatology, and nephrology is minimal. The reasons may be multi-factorial. The clinical cases during exit examination for MD in Internal Medicine are primarily made up of neurologic, cardiologic, gastro-intestinal, and respiratory

medicine disorders. This perhaps leads to an unintentional focus on these super-specialties during the training. Endocrinology is usually restricted to a few classical spot cases of Graves' orbitopathy, Addison's disease and ocular fundoscopy for diabetic retinopathy. Lack of adequate exposure to a variety of endocrinological disorders during internal medicine residency makes reading endocrinology from Harrison's internal medicine an abstract journey, robbing the subject of its beauty in the eyes of a resident. Hence, endocrinology as a super-specialty option was nonexistent for me at the time I obtained my internal medicine degree.

However, destiny had different ideas for me. My first proper exposure to endocrinology was during the 1-year pre-DM senior residency at Safdarjung Hospital, New Delhi. Endocrinology had happened only because I had missed all the internal medicine senior residency interviews. It was then only I realized the beauty of the subject, and it was an absolute joy to see and manage all the patients, which till date I had only read of in text books. I also joined the troupe of annual/bi-annual pilgrimage to temples of learning (medical colleges) in each corner of the country, in search of Nirvana (the elusive DM seat). Endocrinology entrance examinations are a rigorous affair with the candidates being expected to have a thorough knowledge of the subject to clear the written multiple choice pattern examination, with exposure to managing patients a definite advantage during the interview process.

ENDOCRINOLOGY AT INSTITUTE OF POST GRADUATE MEDICAL EDUCATION AND RESEARCH

DM endocrinology finally happened at IPGMER. The first few days were a delirious mix of joy and awe for getting a chance to work in the department I had been dreaming of for the last 1-year. The first few months went into getting acquainted with the functioning of the department and the hospital. My previous experience in endocrinology helped me to jell into the system faster. The department has 3 units for smooth functioning, with annual rotation of residents among the units, ensuring equal opportunity for each resident to work under different professors, and directly learn the finer aspects of the subject from him.

Out-patient department

The department has daily outpatient services from Monday to Saturday, with 3 clinics of general endocrinology and diabetology each per week. Timely and smooth running of outpatient services is the primary responsibility of the 2nd and 3rd year residents. First-year residents join the

outpatient department (OPD) clinics late in the day, only after finishing work in the in-patient services.

The OPD clinics are extremely busy throughout the week, starting from 9 am in the morning and frequently extending late into the evening. The huge patient load ensures that each resident has adequate exposure to working up and managing all different types of endocrinological disorders, even the rarest of the rare ones. OPD is an important place of learning endocrinology, by presenting different patients with diagnostic and management dilemmas to the chief faculty, and learning solutions from them. Developing personal rapport with the patient ensures that the patient repeatedly returns for the follow-up to the same resident. This is a win for all situations, as the patient gets privileged health care, in addition to improved learning for the resident.

In-patient care

Smooth running of the in-patient wards is the primary responsibility of the 1st year residents. It is his job to ensure that all the treatment decision taken during daily bedside rounds are implemented, all the investigations are sent on time, liaison with various other departments such as radiology and nuclear medicine to ensure early dates for special investigations. Developing personal rapport with peer residents in other departments is critical to ensuring work getting done smoothly. Managing endocrine disorders is frequently a teamwork with departments of general and pediatric surgery, urology, and neurosurgery. Learning was predominantly apprenticeship based, asking questions to seniors and faculty. Second year and final year DM residents help out the 1st year residents in chalking out treatment protocols for the admitted patients and a great deal of learning happens in this process.

Residents are posted on night duties as per the roster prepared monthly by the department. This involves taking evening rounds in the wards, ensuing titration of insulin regimen among patients with diabetes as per the blood glucose charting, ensuring all the investigations are collected, reporting to the senior faculty on phone, and attending calls from different departments from across the hospital. These calls primarily involve attending calls from the emergency department, management of diabetes, especially from surgical specialties for patients posted for surgery the next day.

Laboratory endocrinology training

Biochemistry, biochemical and hormonal investigations are a critical part of the endocrinology curriculum. First year primarily involves learning how to collect blood samples for different hormone tests, dynamic testing protocols and

the need for maintaining cold chain for transporting certain samples to the laboratory. A close co-ordination between the resident and the laboratory is a prerequisite for optimal functioning of the endocrinology laboratory. Postings to the endocrinology laboratory in the final year are a critical part of the training. Residents undergo first-hand experience in conducting and interpretation of different hormone assays such as enzyme-linked immunosorbent assay and chemiluminescence. Having a thesis involving biochemical, hormonal, and inflammatory markers investigations gives an added exposure to performing and interpreting various hormonal and biochemical assays using different platforms.

Academics, thesis, and clinical research

Academic classes are scheduled throughout the week from Monday to Friday consisting of journal clubs, journal scans, seminar and clinical case presentation. These classes take place only after the end of the daily OPD clinics in the late afternoon or evening.

An important component of DM training is thesis. Thesis protocols have to be submitted to the university within the initial 6 months of residency. One can choose a research topic by himself in the field of his interest and approach the faculty guide or wait until a topic is allocated to him by the department and his faculty-guide. In spite of being aware of the deadlines from beginning, preparation and intradepartment presentation of research protocols, getting approvals from the Institutional Ethics Committee is an 11th h event, resulting in lot of stress and anxiety. Timely and successful submission of thesis protocol to the university is a big relief for all the 1st year residents.

Lack of dedicated time for research, limited resources result in most of the residents locking up their research protocols in their lockers, only to again take them out perhaps by the middle of the 2nd year of residency, when only a few months are left for submission of the final thesis. Hence, topics are chosen in such a way that patients are easily available, with liberal inclusion and exclusion criteria. Cross-sectional studies are always preferred, which does not involve repeated calling up of patients for follow-up. Also, topics are chosen in such a way that they involve minimal interdepartmental co-ordination so that the resident does not have to depend on somebody else for completion of the work. In spite of the limitations, the faculty fully supports any resident, who intends to do long follow-up study, by arranging for adequate funds for research from different organizations. However, the onus is on the resident to walk the extra mile to ensure that work is done. Limited exposure to biostatistics and research methodology (throughout the medical curriculum since MBBS) also impacts the quality of work done. However, in spite of the limitations, quality

research work does happen in the department, which routinely gets published in various peer-reviewed indexed international journals. The backup provided by the Doctor of Philosophy scholars in the department are a great help in conducting various clinical and translational research work.

Conferences

The department routinely organized state and national level conferences in the different sub-specialties of endocrinology. I was privileged to be associated with the organization of Endocrinology Society of India Conference (ESICON) 2012. Working for ESICON 2012 was a great learning experience, of teamwork, of getting work done, and achieving deadlines. It also resulted in exposure to endocrinology community from across the country and globe, which otherwise would have taken decades. The Endocrine Society of India (ESI) through national level events such as “ESI-Torrent Young Scholars Award Quiz,” annual updates, research methodology workshops and AV Gandhi Award for clinical research provide a great platform for networking and career development for trainees and young endocrinologist.^[5]

The exit

Submission of thesis in the final year is a landmark, and a grim reminder to the final year resident that the days are numbered to the final exit examination, and that he should buckle up and start preparing for the same. Exit examinations consist of theory papers followed by clinical case presentations, viva-voice, spotters and thesis presentation extending over 2 days. It is a harrowing experience not only for the examinees but also for the internal examiners, who have to go extra lengths arranging for the clinical cases, making arrangement for comfortable stay for the external examiners, and ensuring smooth conducting of the examination process.

LIFE AFTER DOCTORATE OF MEDICINE ENDOCRINOLOGY

Although learning endocrinology is a lifelong process, we were confident of managing most of the endocrinology problems independently, after the 3 years of training. Ours was the first batch with 6 residents in the department, and all passed out with flying colors. The successful passing of DM exit examination was although a relief, lead to an

un-expected sensation of feeling of void. Suddenly, we felt that we were no longer a part of the system, with which we had so much got used to and comfortable with. Two of us were in-service candidates and hence had to go back to their respective departments of medicine, as faculty in the same. Two of us entered fully fledged private practice, and myself and one more continued in endocrinology academics in different medical college and research institutes. There is immense scope for growth both in fully fledged private practice as well as academic institutions in India, due to the severe shortage of endocrinologists in our country.^[6]

CONCLUSION

The journey of endocrinology is the journey of a lifetime. Three years of DM is too short a time in this long journey, but it lays the framework for further growth. Every day is a new learning experience. Whenever in doubt and am not sure, I still look up to my teachers for solutions and their guidance.

Acknowledgment

The author is grateful to Subhankar Chowdhury, head of the endocrinology department, IPGMER, Calcutta and Sanjay Kalra for reviewing the manuscript and constructive inputs.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

REFERENCES

1. Selvan C, Ghosh S, Kalra S, Zargar AH. Training in endocrinology: The Indian perspective. *Indian J Endocrinol Metab* 2013;17 Suppl 3:S599-600.
2. Available from: https://www.en.wikipedia.org/wiki/All_India_Pre_Medical_Test. [Last accessed on 2015 Jul 05].
3. Available from: <http://www.jipmer.edu.in/about-us/>. [Last accessed on 2015 Jul 05].
4. Available from: https://www.en.wikipedia.org/wiki/Jawaharlal_Institute_of_Postgraduate_Medical_Education_and_Research. [Last accessed on 2015 Jul 05].
5. Bajaj S, Ghosh S, Kalra S. Endocrinology training in India. *Indian J Endocrinol Metab* 2015;19:448-50.
6. Kalra S, Unnikrishnan AG, Skovlund SE. Patient empowerment in endocrinology. *Indian J Endocrinol Metab* 2012;16:1-3.